

"Free-space Gesture Recognition for Transaction Security and Command Processing"

ABSTRACT OF THE DISCLOSURE

[0042] A sensor panel having a matrix of independently decoded sensors, arranged in a two-dimensional pattern allows a consumer identification unit (CIDU) to detect a user-specific gesture made with a gesturing instrument such as an RF ID device. The CIDU monitors on a timed basis which of the sensors in the panel are receiving a signal from an RF ID device which has entered the proximity of one or more of the sensors. The user moves the sensor in a two-dimensional pattern to perform a "gesture signature" in free space near the panel, and the CIDU records the sequence of receiving sensors. This sequence can then be quickly and efficiently handled as a number to be looked up to identify and authenticate the user. Preferably, the user is allowed to define multiple signature gestures, each having the possibility of being associated with a transaction or authorization level.